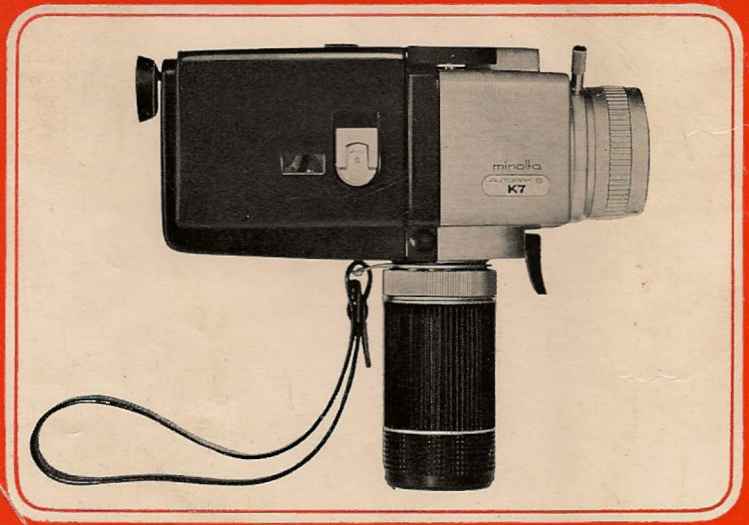
Minolta AUTOPAK-8 K7



Owner's Manual

E

Your new Minolta Autopak-8 K7 combines maximum operating simplicity with performance worthy of the finest professional equipment.

Starting with drop-in instant film loading, the Minolta Autopak-8 K7 is equipped to make movie-making virtually foolproof... easier than ever before.

An extremely sensitive CdS (cadmium sulphide) cell positioned behind the lens, measures *only* the light that hits your film... continuously, automatically and with unsurpassed accuracy.

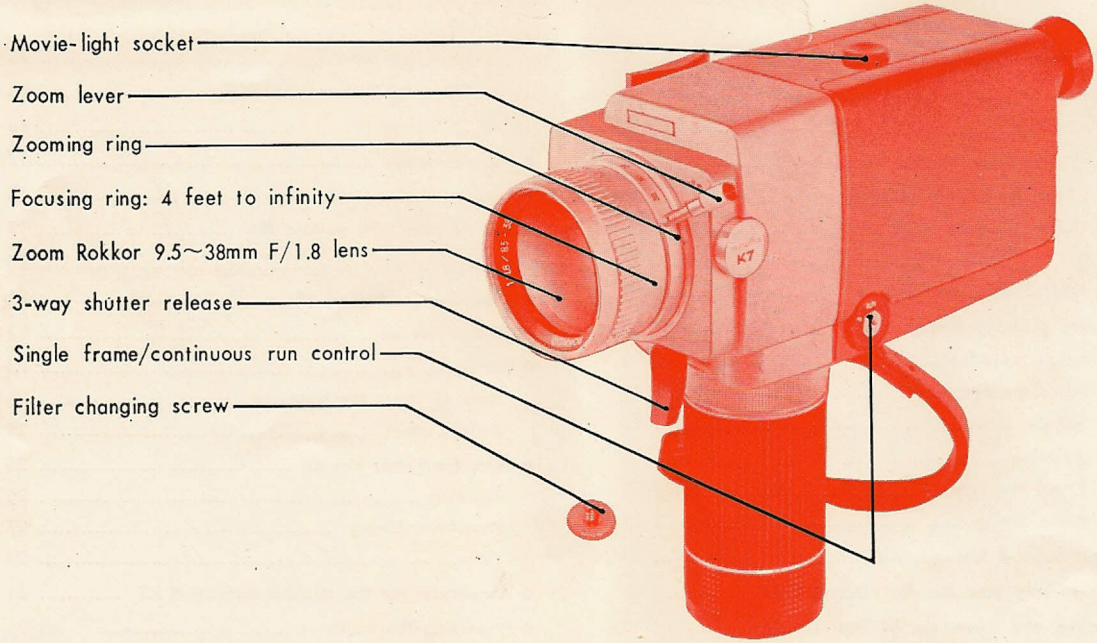
Your new Minolta Autopak-8 K7 is truly a precision instrument, reflecting the superb craftsmanship embodied in every Minolta camera. Given ordinary care, the Minolta Autopak-8 K7 will provide you with a lifetime of perfect movie-making.

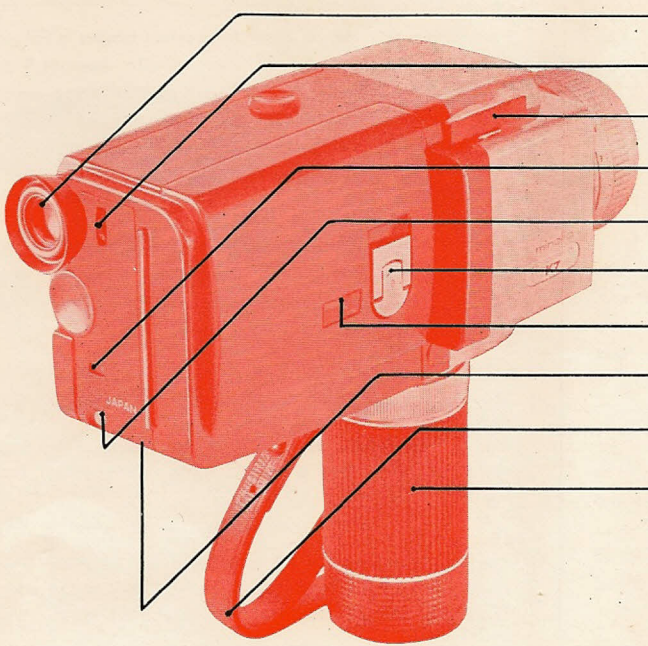
This manual is planned to help you get the most out of your new Minolta Autopak-8 K7. Won't you take a few minutes to read it carefully ?

CONTENTS

- **Parts name** 3
- **Features** 5
- **Specifications** 7
- **Before using your Minolta Autopak-8 K7** 9
  1. Check the battery condition 9
  2. Check exposure meter 9
  3. Set the motor 9
  4. After loading the camera 10
- **A quick guide to filming** 10
  1. Install batteries 10
  2. Focus the eyepiece 11
  3. Set the focus 11
  4. Zooming 11
  5. Check the light 12
  6. Being filming 12
- **About Super-8 film** 13
- **How to hold your Minolta Autopak-8 K7** 14
- **Loading and unloading the film** 15
  1. Open the film chamber 15
  2. Insert the film 15
  3. Close the film chamber 16
  4. To unload film 16
- **Footage scale** 17
- **Filming** 18
- **Use of filter with various film** 19
- **Focusing** 20
- **Exposure warning signal** 21
- **Shutter release** 22
- **Batteries** 23
  How to insert the batteries 23
  Battery check 25
- **Hints for better movies** 25
  Zooming 26
  Panoramic filming 27
  Titles 29
- **Accessories for the Minolta Autopak-8 K7** 31
- **Preserving the batteries** 36
- **Maintenance and care** 36

PARTS NAME


Movie-light socket
Zoom lever
Zooming ring
Focusing ring: 4 feet to infinity
Zoom Rokkor 9.5~38mm F/1.8 lens
3-way shutter release
Single frame/continuous run control
Filter changing screw


Focusing eyepiece
Focusing eyepiece lock
Auto zoom button
Battery check window
Battery check button
Film chamber safety lock
Film load window
Remote-control socket (not shown)
Wrist strap
Hand grip/battery chamber

FEATURES

● Instant Film loading

The Minolta Autopak-8 K7 features fully automatic loading with 50-foot Super-8 film cartridges. Simply click the cartridge into position. There's no need to handle or thread the film, no need to reverse the cartridge. Pictures are approximately 50% larger than with standard 8 mm film.

● Accurate Exposure Measurement

A sensitive CdS (cadmium sulphide) cell automatically sets the lens for perfect exposure. Positioned behind the lens, this electric eye measures only the light that hits the film, automatically compensates for changes in frame speed, lens focal lengths, filters or film ASA rating.

● Power-zooming

The lightweight, high-performance built-in micro-motor driven by five "Pen light" dry batteries, enables you to zoom and film easily and smoothly.

It takes only about 5 seconds to zoom from 9.5 mm to 38 mm focal distance. The focal distance can also be changed manually with the zoom ring.

● Foolproof Safety Signals

Everything you need to know for perfect movies is instantly visible in the viewfinder of your Minolta Autopak-8 K7. A bright scale shows filming aperture and warns against too little or too much light. A footage scale tells you how much film has been taken, how much remains. A unique "window" provides film end signal.

● Precision-Ground Rokkor Lens

Made in Minolta's own factories to assure optical perfection, the Rokkor lens on your camera has a maximum aperture of f/1.8, zooms continuously from 9.5 mm wide angle to 38 mm telephoto.

● Quick focusing

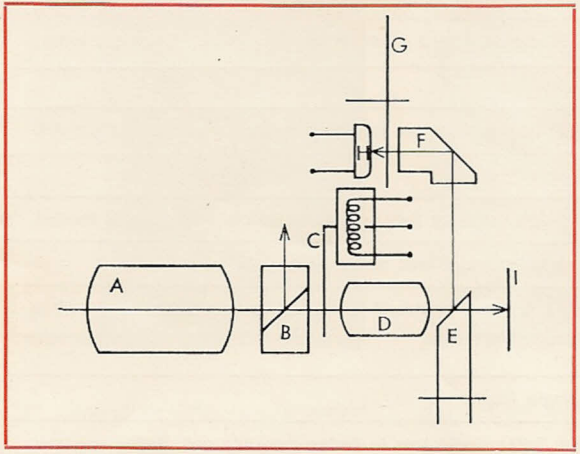
The Minolta Autopak-8 K7 has a fine microprism for quick focusing.

The spot of slanted microprism in the center of the finder snaps the image into crisp sharpness when perfect focus has been achieved.

● Superb Balance

The Minolta Autopak-8 K7 is so superbly balanced it will stand alone on its hand grip. So perfectly is the weight distributed that you hardly know it's in your hand.

• Through-The-Lens Exposure Measurement



(A) Zooming Lenses
(B) Half-Mirror
(C) Diaphragm
(D) Master Lenses
(E) Spindle Shutter
(F) Prism
(G) Compensating Filter For ASA Changes
(H) Cadmium Sulphide Cell
(I) Film Plane

"TTL" (through-the-lens) is the ultimate in accurate exposure measurement. With the CdS meter positioned behind the lens, it measures only the light passing through the lens and striking the film plane. Measurement is continuous and, even as you film, the diaphragm opens or closes constantly and automatically in response to varying light.

How "TTL" Works

Light passing through the zoom lens (A) is divided by the half-mirror (B) part entering the viewfinder and part going toward the film plane. The half-mirror is designed to eliminate loss of light in the finder.

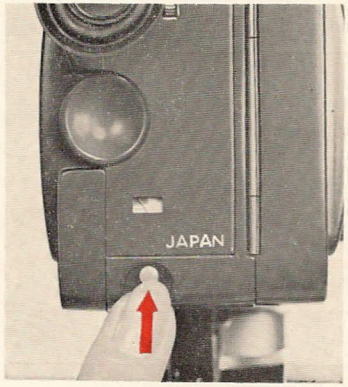
The light going toward the film plane passes the diaphragm (C) and the master lenses (D) before reaching the film plane (I). The spindle shutter (E) is located immediately before the film plane and has a conical surface with a special mirror-like coating. Light hitting this mirror-like coating (E) changes its direction 90° and is thus aimed at the CdS cell (H) through the prism (F). The compensating filter for changes in ASA rating (G) is located in front of the CdS cell (H) to control the amount of light the cell measures.

● SPECIFICATIONS OF MINOLTA AUTOPAK-8 K7

Camera Type :	8 mm movie camera for use with 50-foot Super-8 cartridge.
Lens:	Zoom Rokkor F/1.8 9.5 to 38 mm zoom, 13 elements in 10 groups. Electric zooming operation.
Exposure Control :	Through-the-lens automatic CdS exposure meter powered by five standard penlight AA-size batteries.
ASA Range :	ASA 10–64, daylight, ASA 25–100, artificial light, set automatically when film is loaded.
Filter :	Built-in Type A filter, coupled to cartridge and movie light.
Motor Drum :	Electric micro-motor powered by five standard penlight AA-size batteries. Built-in battery checker.
Frame Speeds :	18 frames per second and single frame.
Viewing and Focusing:	Single lens reflex viewfinder. Safety indicators in finder show film end, filming aperture, too much or too little light. Eyepiece with visibility adjustment (+1 to −4 diopter) and lock device.
Frame Counter :	Scale in finder shows film taken and remaining.

Shutter Release :	3-way operation for regular or continuous run, safety lock and battery saver for exposure meter.
Accessories :	Close-up lens for filming as close as 13–7/8 inches (39.90 cm)
	Remote control for filming up to 10 feet away from camera.
	Lens shade, 49ϕ, screw-in.
	UV, yellow, neutral density (4X) and 80B filters, 49ϕ screw-in.
	Rubber eyepiece hood
	Leather carrying case
Dimensions:	Height with handle : 6–3/4″ (171 mm)
	Front to back including lens : 7–1/2″ (189 mm)
	Width : 3″ (77 mm)
Weight :	37 oz. (1,240 g)

BEFORE USING YOUR MINOLTA AUTOPAK-8 K7

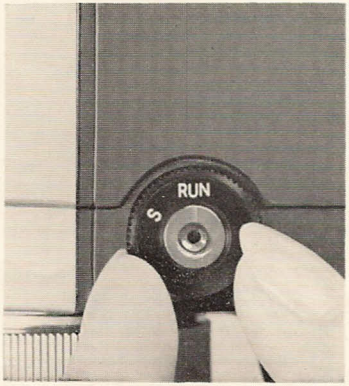


1. Check Battery Condition

Push the red battery check button firmly. The needle in the battery check window will move into the white area if the batteries are working satisfactorily.

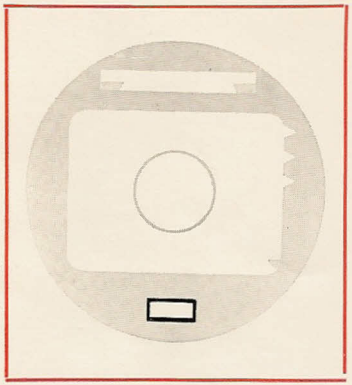
2. Check Exposure Meter

Sight through the finder, point the camera toward a bright light and move your hand back and forth across the lens. If the meter is registering, the needle at the top of the viewfinder will swing back and forth across the scale.



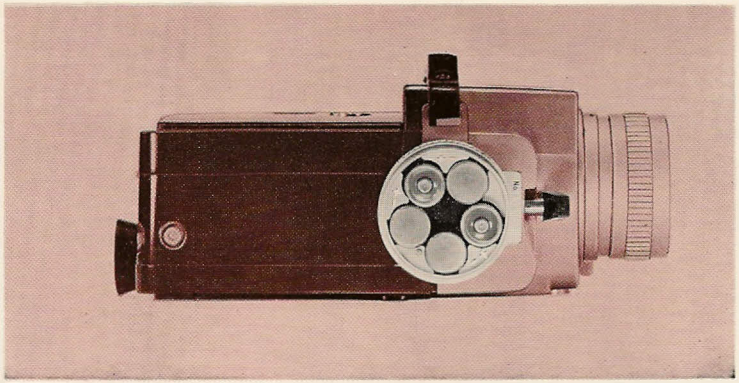
3. Set the Motor

Turn the single frame control to "RUN" and press the shutter release. A constant, low hum will indicate proper motor operation.



4. After Loading the Camera

A rectangular white "window" will be visible at the bottom of the viewfinder. Do not film until you can see this "window."



1. Install Batteries

Unscrew the bottom of the hand grip and insert five penlight AA-size batteries carefully following the + or − indicators. Check the batteries.

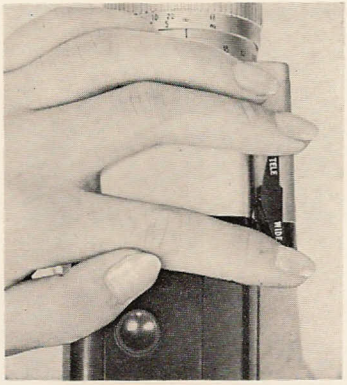
Insert the Film Unlock the film chamber door and insert the film at a slight angle (front edge first), pressing down gently until you hear a click. This automatically sets the correct ASA rating. When the film is properly seated, a rectangular white "window" will appear in the finder. You will also be able to see the film cartridge through the window in the chamber door.

2. Focus the Eyepiece

Loosen the eyepiece lock and turn the eyepiece until the image is as clear as you can get it (not necessarily sharp). Then lock the eyepiece.

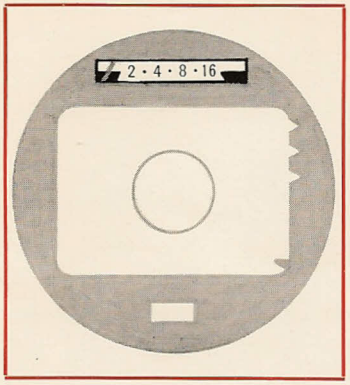
3. Set the Focus

Turn the focusing ring clockwise or counter-clockwise, until the subject in the center of the finder field becomes sharp.



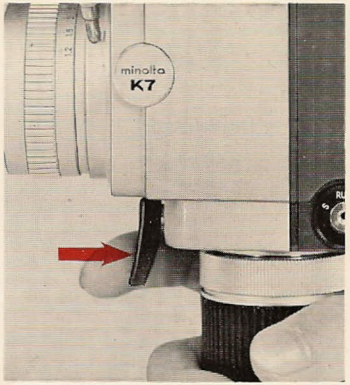
4. Zooming

Press the zoom button until the desired framing is obtained.



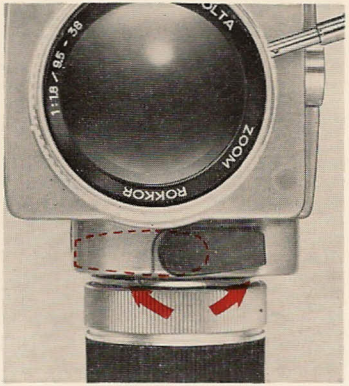
5. Check the Light

When the needle at the top of the viewfinder is far left or right (in a red area), there is too little or too much light for good filming.



5. Begin Filming

Simply press the release firmly while aiming the camera at your subject. As you look through the finder, the footage scale moves up. At film end, the white "window" will disappear.



☆ After Filming

Turn the shutter release lever to left or right without depressing it down. This will lock the release and turn off the exposure meter.

ABOUT SUPER-8 FILM

Your Minolta Autopak-8 K7 uses Super-8 film cartridges, thus giving you several major advantages:

1. Loading is Quick, Easy and Foolproof

- ☆ Simply drop the cartridge into the camera.
- ☆ It is impossible to expose the film while loading ... even in bright.
- ☆ You get a full 50-feet of filming without reversing the cartridge.

2. Forget about ASA Numbers

- ☆ Films are sold with different "speeds," which indicate different sensitivities to light. Your Minolta Autopak-8 K7 sets itself automatically for these different "speeds" (ASA ratings) when the film is loaded.

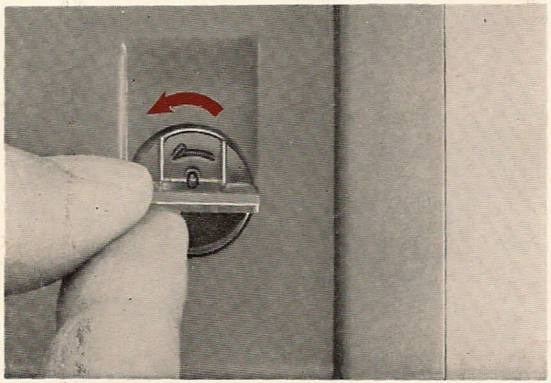
3. Better Movie Quality

- ☆ Each frame of Super-8 film is approximately 50% larger than on regular 8 mm film.
- ☆ As a result, pictures are sharper and brighter.
- ☆ Super-8 film also lends itself more easily to the addition of sound.

● HOW TO HOLD YOUR MINOLTA AUTOPAK-8 K7

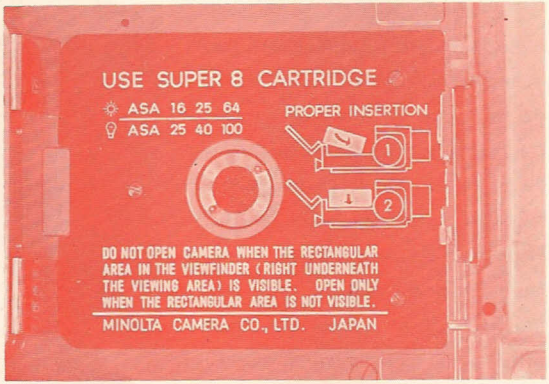
The Minolta Autopak-8 K7 is designed for precise balance and handling ease. To use your camera most comfortably, slip your right or left hand through the hand strap and grasp the handle firmly, keeping the forefinger of the same hand over the shutter release. This leaves one hand free for zooming. When not zooming, you may find in helpful to use that free hand to grasp the camera firmly at the top.

● LOADING AND UNLOADING THE FILM



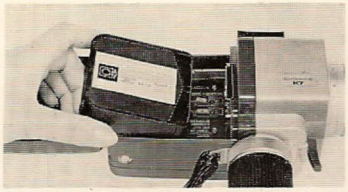
1. Open the Film Chamber

Turn the chamber safety lock in the direction of the arrow.


USE SUPER 8 CARTRIDGE
ASA 16 25 64
ASA 25 40 100
PROPER INSERTION
1
2
DO NOT OPEN CAMERA WHEN THE RECTANGULAR AREA IN THE VIEWFINDER (RIGHT UNDERNEATH THE VIEWING AREA) IS VISIBLE. OPEN ONLY WHEN THE RECTANGULAR AREA IS NOT VISIBLE.
MINOLTA CAMERA CO., LTD. JAPAN

2. Insert the Film

Seat the Super-8 cartridge by holding it at a slight angle with the center hole down and the film label up. Then press down until you hear a click.



3. Close the Film Chamber

Set the chamber door firmly against the camera and turn the lock clockwise. You are now ready to take pictures.

4. To Unload Film

Open the film chamber, lift cartridge from back and slide out at a slight angle.

☆ The ASA rating of your film is set automatically when camera is loaded.

☆ A white "window" appears at the bottom of the viewfinder when film is loaded.

☆ The window in the chamber door shows what kind of film is loaded.

CAUTION: Do not touch the spring on the hinge side of the film chamber.

● FOOTAGE SCALE

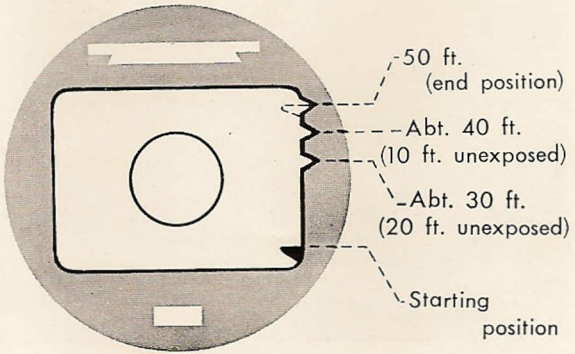
As you continue filming, the film (frame) counter indicates the length of film exposed. It is very convenient, because you can ascertain the length of film both exposed and unexposed.

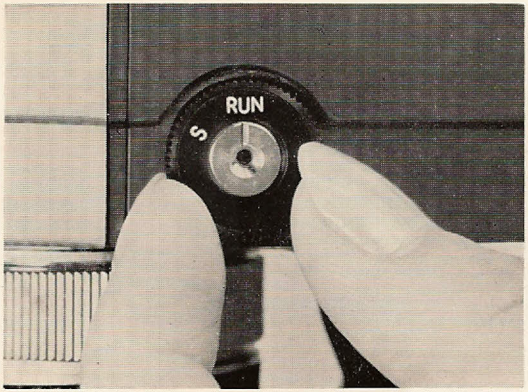
You can see a triangular indicator on the right of the view field of the viewfinder. As the film is advanced, the indicator moves up accordingly.

When the film comes to the end, the film end signal (the long bright window below the viewfinder eyepiece) disappears.

Be sure to take out the cartridge only after confirming that the signal has disappeared.

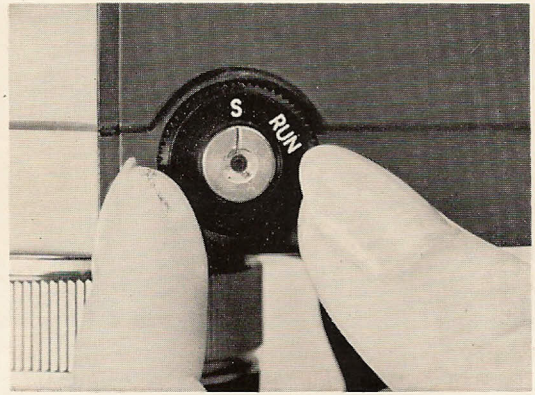
The three notches on the upper right of the viewfinder eyepiece indicate from top to bottom: (1) the film comes to the end, (2) 10 feet remain unexposed, and (3) 20 feet remain unexposed.





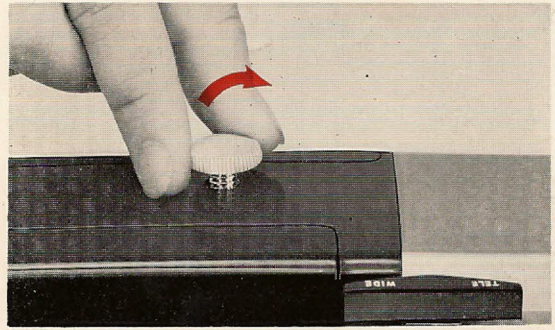
Normal photography

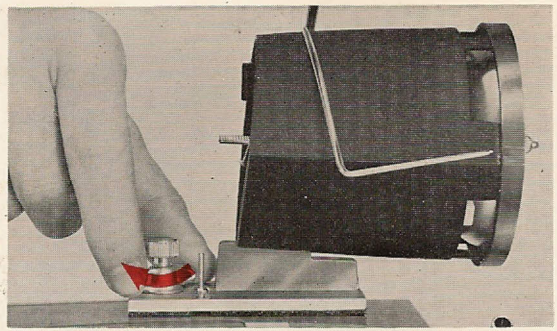
When setting the frame control to "RUN" frame speed is 18 f.p.s. (shutter speed: 1/40 sec.) for normal photography.



Single Frame Photography

Simply set the single frame control to "S." Each push of the shutter release will then expose just one frame. This is valuable in preparing cartoons and time-lapse photography where, for example, you wish to record plant growth over a period of time. Ideally to prevent excessive jar, a cable release should be screwed into the single frame control and used in place of the shutter release.





Use of Filter with Various Film

Your Minolta Autopak-8 K7 is built-in Type A filter coupled with cartridge and movie light.

1. Indoor Type Color Film

a) Using Indoor Type Color Film in Artificial Light

* When using indoor type color film with movie light, built-in Type A filter is removed automatically.
* When using indoor type color film with other artificial lights, insert filter changing screw into movie light socket.
  (Filter changing screw is packed with camera)

b) Using Indoor Type Color Film in Daylight

* When using indoor type color film in daylight (not using artificial light) built-in Type A filter is set in your camera, viewfinder will appear to be light brown.

2. Daylight Type Color Film

a) Using Daylight Type Color Film in Day light

* When using daylight type color film in daylight, Type A filter is removed automatically.

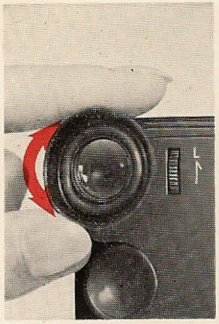
b) Using Daylight Type Color Film in Artificial Light

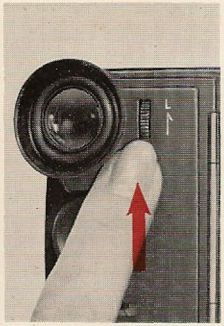
* When using daylight type color film in artificial light, a Minolta 80 B color filter is recommended. This filter is available as an optional accessory to the Minolta Autopak-8 K7.

3. Monochrome Film

* Use of the conversion filter is not necessary when black-and-white film is utilized.

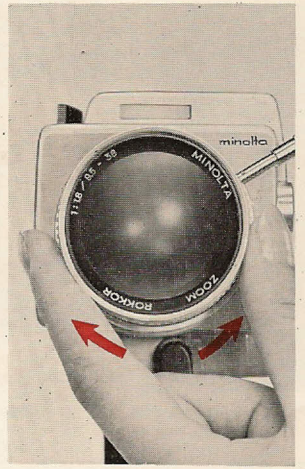
FOCUSING

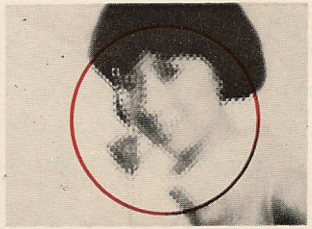


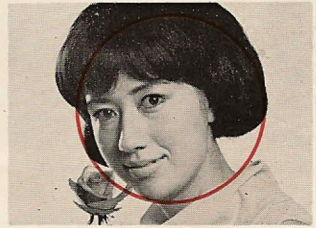


Focus the Eyepiece for Your Own Eyesight

Loosen the eyepiece by turning the eyepiece lock in a downward direction. After the eyepiece is unlocked, turn it while sighting through the finder until you see the clearest possible image (not necessarily sharp). Then lock the eyepiece into position by turning the lock in the direction of the arrow. Unless your eyesight changes, you will have no reason to re-focus the eyepiece.







Focusing

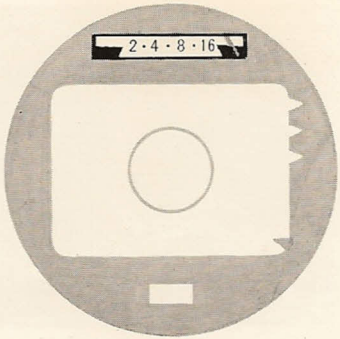
In order to focus turn the focus ring clockwise, or counter-clockwise. The viewfinder consist of a group of slanted microprism which are concentrated at the center of the viewing area. At the sharpest point you are in focus. This should be done with the lens set at full telephoto-38 mm.

● EXPOSURE WARNING SIGNAL

The scale at the top of the viewfinder tells you the aperture at which you are filming and warns against too little or too much light.

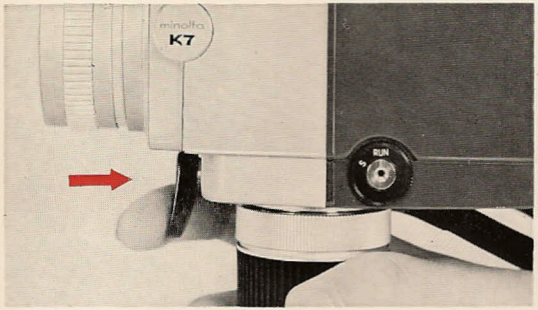
As you film, you will notice the needle swinging constantly across the scale, moving automatically to the aperture number at which the picture is being taken. The needle must be in the white area of the scale for correct exposure.

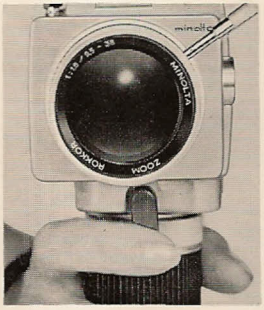
☆ When the needle appears in the extreme left, red area of the scale, the subject is too dark for proper exposure.

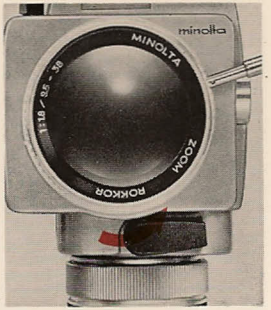


☆ When the needle stays in the red area at the extreme right the subject is too bright for proper exposure. This occurs with snow or beach scenes and may be corrected with a neutral density filter (see accessories).

● SHUTTER RELEASE





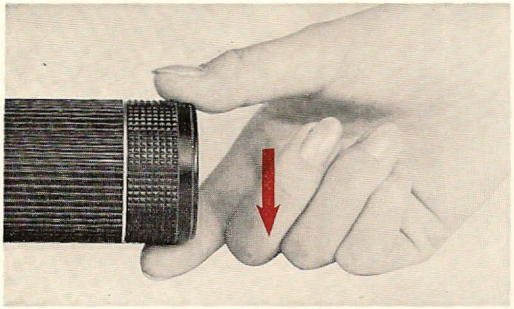


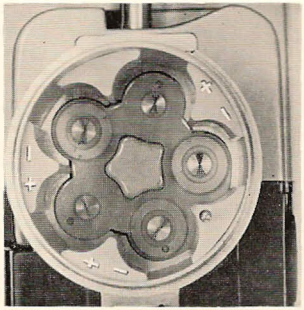
The shutter release on the Minolta Autopak-8 K7 can be moved to three different positions for regular filming, continuous run, lock and battery saver. For regular filming the release should be parallel to the hand grip. Hold the camera securely and film by pressing the release.

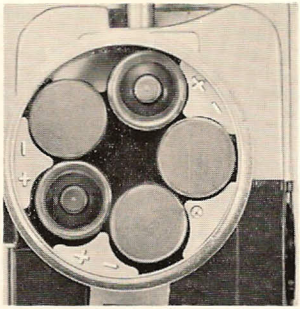
For continuous run, depress the release and turn it right (facing the camera). It will remain depressed and the motor will continue to run. To lock the release, save battery life and prevent accidental filming, turn it left or right without depressing it.

For single frame photography and on those occasions when you are unable to hold the camera steady enough, you may activate the shutter with a cable release threaded into the single frame control. Note: When using a cable release, the shutter release should be parallel to the hand grip.

BATTERIES







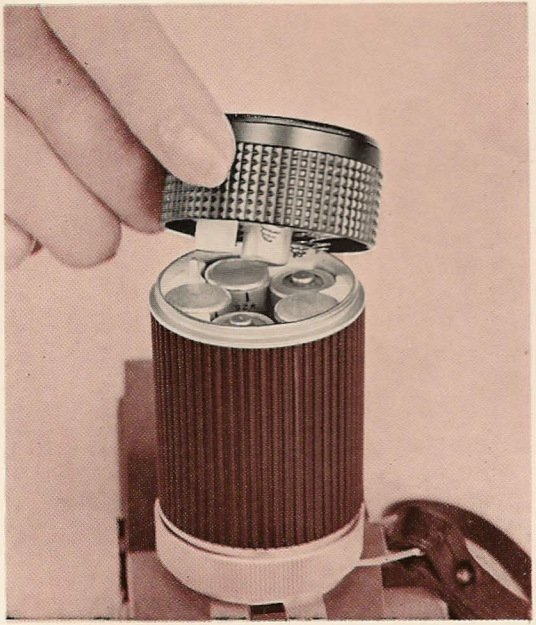
Five standard penlight AA-size batteries provide power for the motor and CdS cell.

How To Insert The Batteries

1 Open the battery chamber by turning the bottom of the hand grip counterclockwise.

2 Insert each battery according to the + or − sign shown in the chamber. "+" equals the raised end of the battery. "−" equals the flat end.

Caution : Do not attempt to operate camera until you are sure batteries are correctly seated.

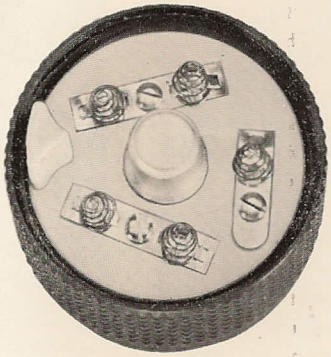


3 After you have inserted the batteries, replace the handle bottom by fitting the triangular "key" into the corresponding opening.

Remove the batteries of the camera if it is to be left unused for more than a month.

About 10 rolls of film may be exposed with each set of batteries.

Caution : Do not touch the spring on the bottom of the hand grip.



BATTERY CHECK

Since all dry batteries gradually lose their power in time, whether used or not, the Minolta Autopak-8 K7 is equipped with a battery check. It is wise to check battery condition each time you use the camera, thereby avoiding film waste.

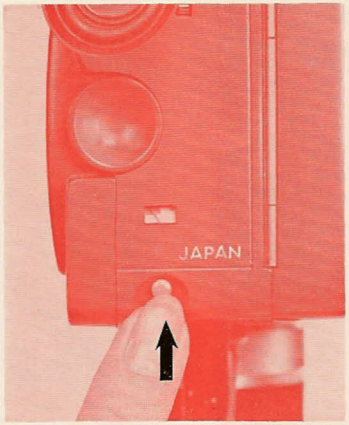
How To Use The Battery Check

1 Press the red battery check button. The needle in the battery check window will swing into the white area.

2 If the battery check needle remains in the red area while the button is depressed, replace all five batteries.

3 The battery check indicates condition of both motor and CdS cell.

Caution : Do not run motor while checking batteries. Do not depress battery check button any longer than necessary as this drains the batteries.

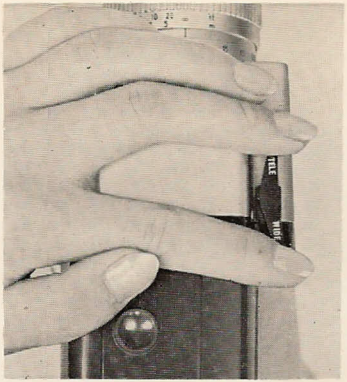


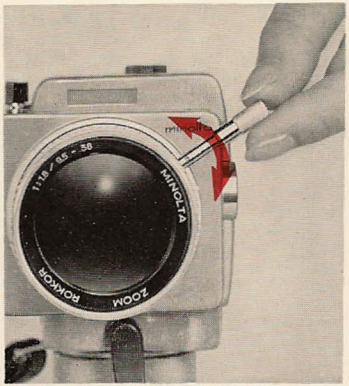
HINTS FOR BETTER MOVIES

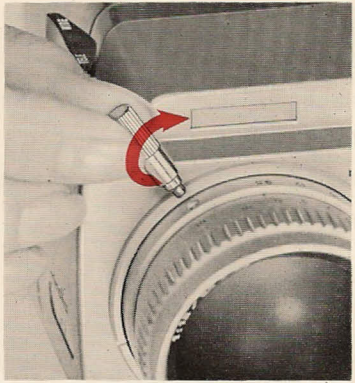
SCENE LENGTH

About 5 seconds is the right length for each scene, although some variation is advisable to avoid monotony. 5 seconds equals about 1 foot, 3 inches of film. For moving objects, 8 seconds are better.

● ZOOMING







ZOOMING :

The Zoom Rokkor lens on your camera will move continuously from 9.5 mm wide angle to 38 mm telephoto by pressing the auto zoom buttons while looking through the viewfinder.

As you zoom, the subject will becomes larger or smaller in the viewfinder. Thus you can use the zoom lens to frame your subject precisely as you want it, then shooting as with an ordinaly fixed focal length lens. This zooming technique helps obtain dynamic effects.

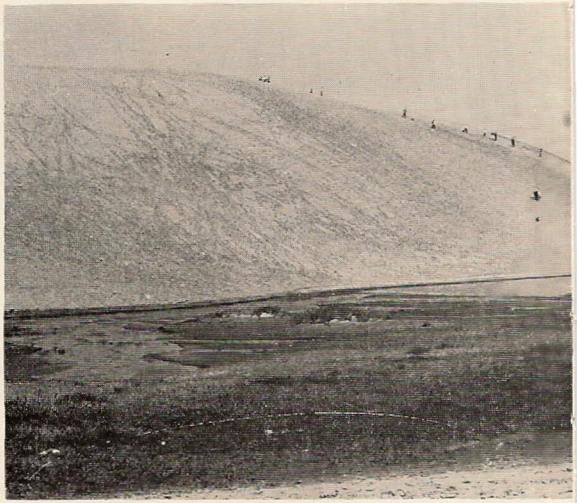
Zooming can also be done manually.

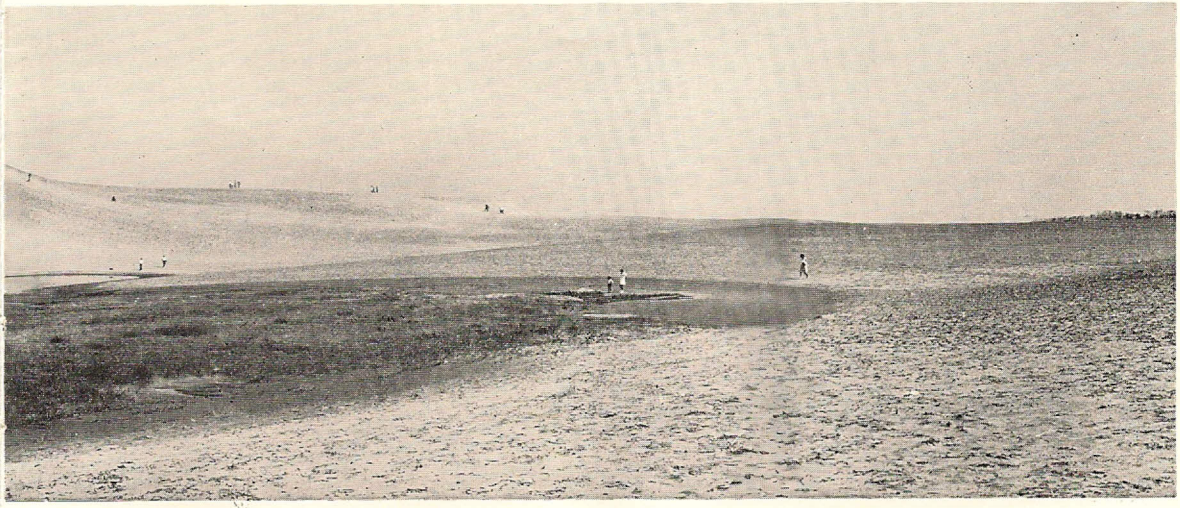
Zoom action is provided by turning the extension zoom lever, which may be screwed into the lens at either of two positions, enabling right or left hand operation.

PANORAMIC FILMING

With movie cameras (unlike still cameras) you can obtain spectacular panoramic shots by moving the camera while filming. This is called "panning" and results in pictures that appear much wider than they would be from a single, fixed position.

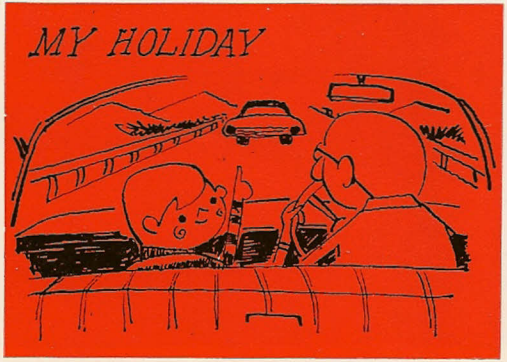
- ☆ Pan slowly
- ☆ Pan smoothly without wavering
- ☆ Pan in a straight line, either vertically or horizontally
- ☆ Lead the camera into the subject so that the main point of interest will appear at the end of the pan
- ☆ If possible, use a tripod for steadier panning

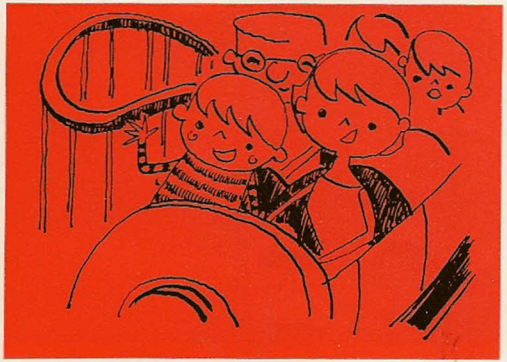




TITLES

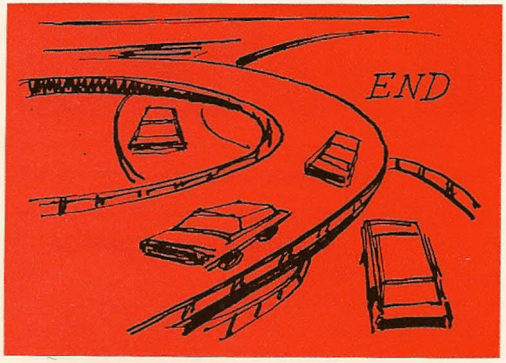
Even with sound movies, titles are important. In silent films titles are imperative since they tie the picture together. The Minolta Autopak-8 K7 is a single lens reflex camera that shows you exactly the area you are photographing. Therefore titles are very easy to make because there is no parallax correction problem. In addition, you can use zoom effects when making titles as well as when filming. The Minolta Autopak-8 K7 can be focused as close as 4 feet. But, with the zoom lever set at 38 mm, you can frame as small an area as $4\frac{9}{16} \times 6\frac{1}{8}$ in. (116 × 155 cm). If you wish to film a smaller area, use a title card and





the accessory close-up lens. This lens permits focusing as close as 1′–3⅞″ inches from the subject. When used with the zoom lens at 38 mm, the subject area is only 1⅜ × 1⅝ inches.

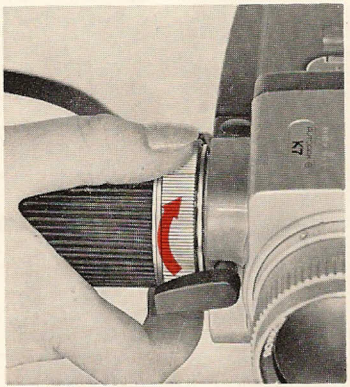
Focusing distances and subject area with close-up lens:

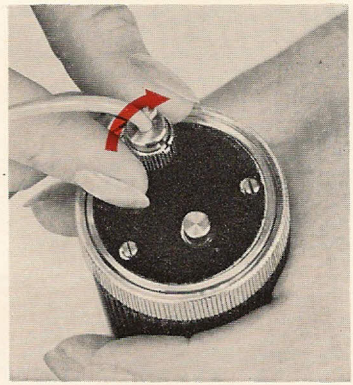


Distance Scale of Camera	Actual Focusing Distance	Focal Distance of Lens	Size of Subject
∞	50.12 cm	9.5 mm	174 × 233mm
		38 mm	43.3 × 57.7mm
1.2 m	39.90 cm	9.5 mm	123 × 165mm
		38 mm	30.6 × 40.9mm
∞	1′ 7¾″	9.5 mm	6⅞″ × 9⅛″
		38 mm	1¾″ × 2¼″
4′	1′ 3⅞″	9.5 mm	4⅞″ × 6½″
		38 mm	1⅜″ × 1⅝″

REMOTE CONTROL

The remote control accessory is valuable in shooting situations where it is impractical to hold the camera or where your presence might distract the subject. These include candid scientific research and self-filming.

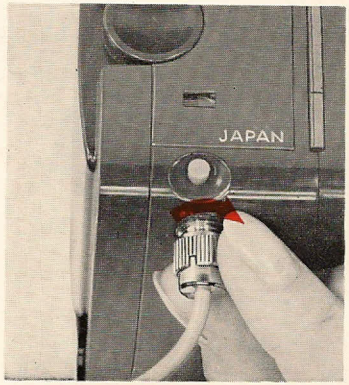




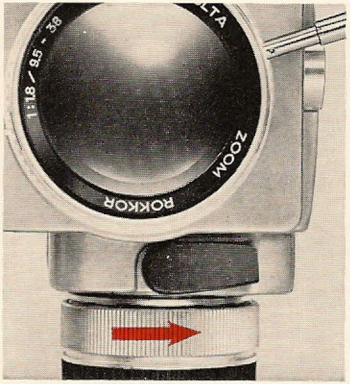
How to Use the Remote Control

a) Unscrew the hand grip at the top. Then secure the camera body to a tripod, using the tripod socket on the bottom of the camera.

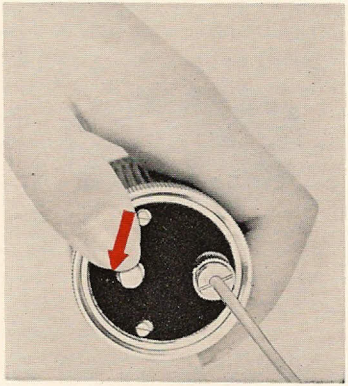
b) Connect one terminal of the remote control cord to the battery socket on top of the hand grip.



c) Connect the other remote control terminal to the remote control socket on the camera body.



d) Turn the shutter release to continuous run position.



e) Operate the motor by pressing the button on the hand grip. This substitutes for the regular shutter release.

FILTERS

The following accessory filters are available for use with the Minolta Autopak-8 K7 :

UV

Used to absorb excessive ultra-violet light when shooting mountain, snow, sea and other distant scenes. Tends to cut through haze.

Y-48:

This yellow filter renders red and yellow objects lighter than the eye sees them. Also used to darken skies, emphasize clouds. This filter is for Black & White film.

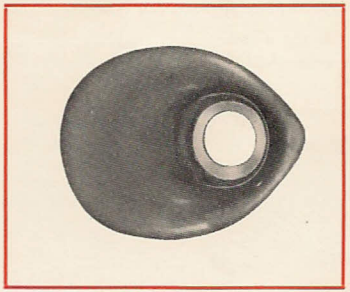
NDX4 :

This is a neutral gray filter used to adjust the amount of exposure. It is especially useful when there is a possibility of over-exposure at the smallest lens aperture (e.g. when filming summer beach or brilliant snow scenes). Filter Factor-4X.

80B:

Permits the use of daylight film indoors. Filter Factor-1.5X.

☆ The through-the-lens exposure system of the Minolta Autopak-8 K7 eliminates the need to compensate for filters, as light is measured after it passes through the filter.



Eyepiece Hood

Eyepiece hood is recommended to prevent harmful light from entering the eyepiece.

Lens Shade

A lens shade is recommended to prevent any stray light from entering the lens.

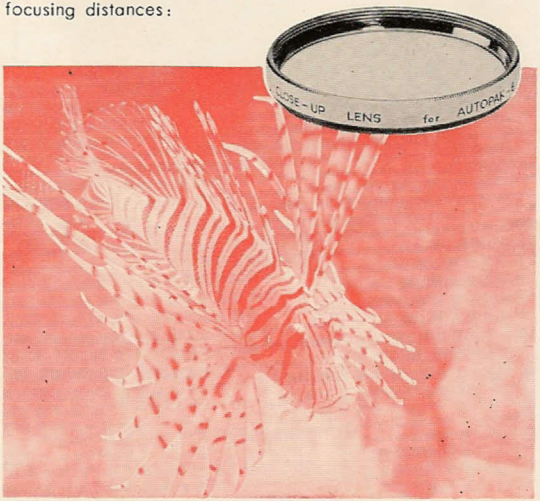
The hood is specially designed to function perfectly with any lens angle, including telephoto or wide angle.

A lens hood is especially valuable for movie light photography, beach and snow photography.

CLOSE-UP LENS

A close-up lens is available for title shooting and close-ups. With this lens, you can shoot subjects as close as 1′-3⅞″ Zooming is also possible.

Use of the close-up lens causes the following changes in focusing distances:



Distance on Lens (m)	∞	20	10	5	3	2	1.5	1.2
Actual Focusing Distance (cm)	50.12	49.36	48.63	47.23	45.48	43.46	41.60	39.90
Distance on Lens (ft)	∞	30	20	10	7	6	5	4
Actual Focusing Distance (ft)	1′–7¾″	1′–7 1/16″	1′–6 13/16″	1′–5 15/16″	1′–5¼″	1′–4⅞″	1′–4 7/16″	1′–3⅞″

☆"Actual focusing distance" indicates the distance between the film plane and the subject.

The following table indicates the relationship between the photographic distance from the camera (the distance between the film plane and the subject) and the size of the real subject:

	Distance Scale of Camera	Actual Focusing Distance	Focal Length of Lens Used		
			9.5 mm	19 mm	38 mm
Close up Lens	∞	50.12 cm	174 × 233 mm	86.4 × 115 mm	43.3 × 57.7 mm
	1.2	39.90 cm	123 × 165 mm	61.3 × 81.9 mm	30.6 × 40.9 mm
	∞	1′–7¾″	6⅞″ × 9⅛″	3⅜″ × 4½″	3 1/16″ × 2¼″
	4′	1′–3⅞″	4⅞″ × 6½″	2⅜″ × 3¼″	1 3/16″ × 1⅝″

PRESERVING THE BATTERIES

- ☆ If the camera is to be unused for a month, remove the batteries.
- ☆ Never touch the battery contact spring on the bottom of the battery chamber or the contact spring inside the film chamber.
- ☆ Use the battery check button for only a few seconds.

MAINTENANCE AND CARE

Over a period of time, dirt or dust may accumulate in the camera. Keeping the camera and lens clean are essential to proper performance.

- When storing the camera for extended periods of time, keep it in a dry and cool place.
- Clean lens, finder window with soft clean cloth only, or brush gently with lens brush.
- The film gate should always be clean. When inserting a new reel of film, dust it with a soft brush.

MEMO

MEMO

Minolta masters photography

Minolta

MINOLTA CAMERA CO., LTD.

#PAK7-612 IE

Printed in Japa